US006350111B1

(12) **United States Patent**
Perevozchikov et al.

(10) **Patent No.: US 6,350,111 B1**
(45) **Date of Patent: Feb. 26, 2002**

(54) **SCROLL MACHINE WITH PORTED ORBITING SCROLL MEMBER**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/639,004**

(22) Filed: **Aug. 15, 2000**

(51) **Int. Cl.**[7] **F04B 49/03**; F04C 18/04; F04C 29/10

(52) **U.S. Cl.** **417/440**; 418/55.6; 418/87; 418/99

(58) **Field of Search** 417/310, 440; 418/55.6, 84, 87, 99

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(57) **ABSTRACT**

A scroll compressor includes a fluid injection system. The fluid injection system includes a fluid passage which extends from a position outside of the shell of the compressor to the fluid pockets created by the wraps of the scroll members. The fluid passage extends through the orbiting scroll member. The fluid injection system can be used to inject gaseous or liquid refrigerant, lubricant or the fluid injection system can be used to vent the moving pocket to the suction area of the compressor for capacity modulation.

25 Claims, 4 Drawing Sheets